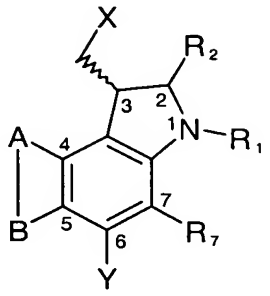
Amendments to the Claims

This listing of claims will replace all prior versions of claims in this application.

1. (Previously presented) A compound of formula **I** capable of forming a combinatorial unit:



(I)

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wherein:

X is an electrophilic leaving group;

Y is selected from NH-Prot, O-Prot, S-Prot, NO_2, NHOH, N_3, NHR, NRR, N=NR, N(O)RR, $NHSO_2R$, N=NPhR, SR or SSR, where Prot represents a protecting group;

A and B collectively represent a fused benzene or pyrrole ring (in either orientation), which is substituted by a CO_2H or CO_2R group and is further optionally substituted by up to respectively 3 or 1 group(s) independently selected from R, OH, OR, halo, nitro, amino, Me_3Sn, CO_2H, CO_2R;

R_1 is a nitrogen protecting group, where if Y includes a protecting group, these protecting groups are orthogonal;

R_2 and R_7 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

wherein R is selected from:

(a) a lower alkyl group having 1 to 10 carbon atoms,

(b) an aralkyl group (i.e. an alkyl group with one or more aryl substituents), preferably of up to 12 carbon atoms;

the alkyl group of (a) or (b) optionally containing one or more carbon-carbon double or triple bonds, which may form part of a conjugated system; and

(c) an aryl group, preferably of up to 12 carbon atoms;

and wherein:

R is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms, which may form part of, or be, a functional group;

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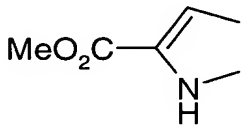
except that when R_1 is Boc, Y is NO_2, X is Cl, and R_2 and R_7 are H, then A and B do not collectively represent either an unsubstituted benzene ring or:



2. (Previously presented) A compound according to claim 1, wherein R is independently selected from a lower alkyl group having 1 to 10 carbon atoms, or an aralkyl group, preferably of up to 12 carbon atoms, or an aryl group, preferably of up to 12 carbon atoms, optionally substituted by one or more halo, hydroxy, amino, or nitro groups.

3. (Original) A compound according to claim 2, wherein R is independently selected from lower alkyl groups having 1 to 10 carbon atoms optionally substituted by one or more halo, hydroxy, amino or nitro groups.

4. (Previously presented) A compound according to claim 3, wherein R is an unsubstituted straight or branched chain alkyl group, having 1 to 10 carbon atoms.

5. (Previously presented) A compound according to claim 1, wherein R_1 has a carbamate functionality where it binds to the nitrogen atom of the CPI.

6. (Previously presented) A compound according to claim 1, wherein Y is NH-Prot, O-Prot or S-Prot.

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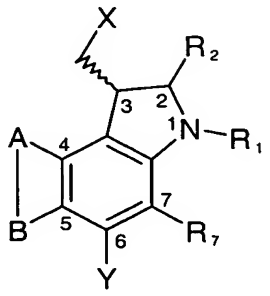
7. (Previously presented) A compound according to claim 6, wherein Y is NH-Prot.

8. (Previously presented) A compound according to claim 1, wherein X is either halogen or OSO_2R.

9. (Previously presented) A compound according to claim 1, wherein the **4,5** fused ring is substituted by $-CO_2R$ in the 2 or 3 position if it is a benzene ring, or in the 2 position if it is a pyrrole ring.

10. (Original) The use of compounds of formula **I**:



(I)

wherein:

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X is an electrophilic leaving group;

Y is selected from NH_2, NH-Prot, OH, O-Prot, SH, S-Prot, NO_2, NHOH, N_3, NHR, NRR, N=NR, N(O)RR, $NHSO_2R$, N=NPhR, SR or SSR, where Prot represents a protecting group;

A and B collectively represent a fused benzene or pyrrole ring (in either direction), which is optionally substituted by up to respectively 4 or 2 groups independently selected from R, OH, OR, halo, nitro, amino, Me_3Sn, CO_2H, CO_2R;

R_1 is a nitrogen protecting group, where if Y includes a protecting group, these protecting groups are orthogonal;

R_2 and R_7 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

wherein R is selected from:

(a) a lower alkyl group having 1 to 10 carbon atoms,

(b) an aralkyl group (i.e. an alkyl group with one or more aryl substituents), preferably of up to 12 carbon atoms;

the alkyl group of (a) or (b) optionally containing one or more carbon-carbon double or triple bonds, which may form part of a conjugated system; and

(c) an aryl group, preferably of up to 12 carbon atoms;

and wherein:

R is optionally substituted by one or more halo, hydroxy, amino, or nitro groups, and optionally contains one or more hetero atoms, which may form part of, or be, a functional group;

in methods of combinatorial chemistry synthesis, wherein the compound of formula **I** is joined to a solid support by a chain comprising at least one combinatorial unit.

11. (Original) The use according to claim 10, wherein Y is NH_2, NH-Prot, OH, O-Prot, SH, or S-Prot.

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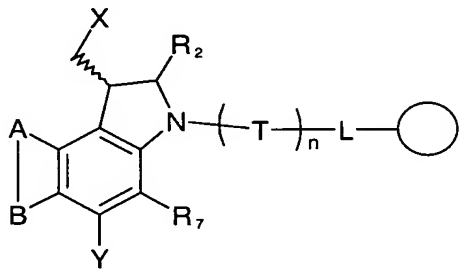
12. (Original) A compound of formula **III**:



(III)

wherein:

X, Y, A, B, R_2 and R_7 are as defined in claim 10;

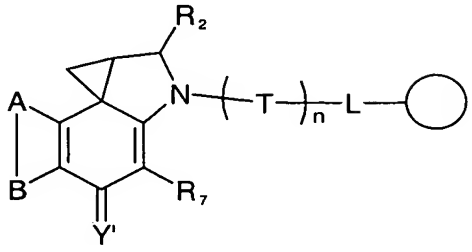
T is a combinatorial unit;

N is a positive integer, where if n is greater than 1, each T may be different;

L is a linking group, or less preferably a single bond; and,

◯ is a solid support.

13. (Original) A compound of formula **III'**:



(III')

wherein:

A, B, R_2, R_7, T, n, L and ◯ are as defined in claim 12; and,

Y' is NH, O or S.

14. (Original) A compound of formula **V**:

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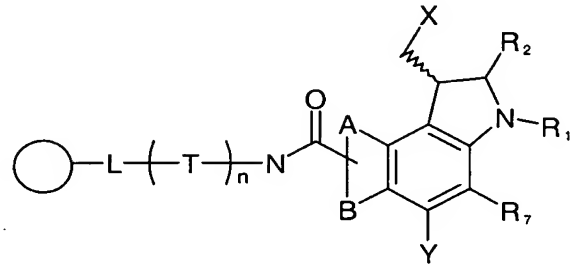


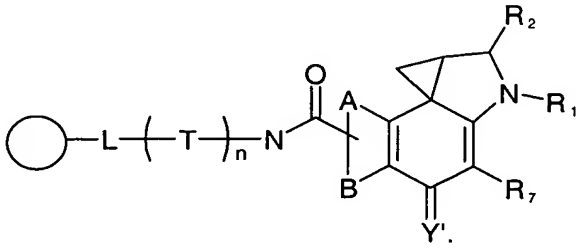
(V)

wherein:

A, B, Y, R_1, R_2, and R_7 are as defined in claim 10; and

T, n, L and ◯ are as defined in claim 12.

15. (Currently amended) A compound of formula **V'**:



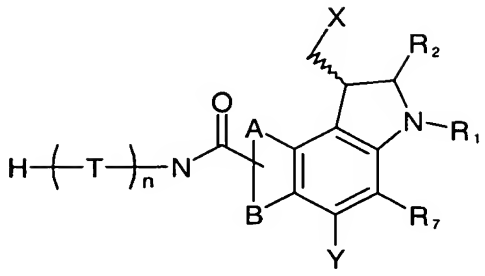
(V')

wherein

A, B, R_1, R_2, and R_7 are as defined in claim 10; and,

T, n, L, $Y^{+/-}$ and ◯ are as defined in claim 13.

16. (Original) A compound of formula **IV**:



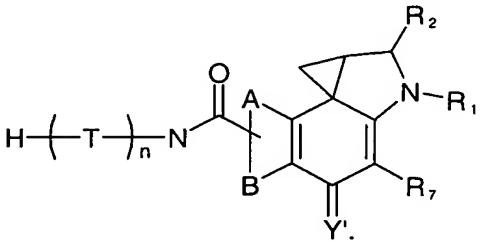
(IV)

wherein:

A, B, X, Y, R_1, R_2 and R_7 are as defined in claim 10; and,

T and n are as defined in claim 12.

17. (Original) A compound of formula **IV'**:



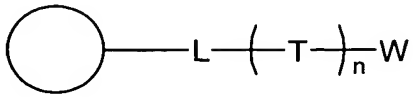
(IV')

wherein:

A, B, T, n, R_1, R_2 and R_7 are as defined in claim 16; and,

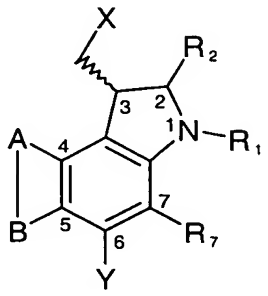
Y' is NH, O or S.

18. (Original) A method of preparing a compound according to claim 12 by reaction of a compound of formula **VI**:



(VI)

with a compound of formula **I**:



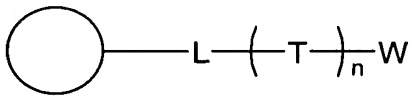
(I)

wherein:

A, B, R_2, R_7, T, n, L and ◯ are as defined in claim 12; and,

W is H or an atom or group for providing a functional group capable of reaction with $-NH_2$.

19. (Previously presented) A method of preparing a compound according to claim 14, by reaction of a compound of formula **VI**:



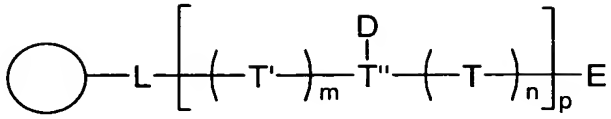
(VI)

with a compound of formula **I** according to claim 10, where the **4,5** fused ring is substituted by $-CO_2R$ in the 2 or 3 position if it is a benzene ring, or in the 2 position if it is a pyrrole ring, and wherein:

T, n, L and ◯ are as defined in claim 14; and,

W is H or an atom or group for providing a functional group capable of reaction with -COOH.

20. (Original) A compound of formula **VII**:



(VII)

wherein:

 , T, and L are as defined in claim 12;

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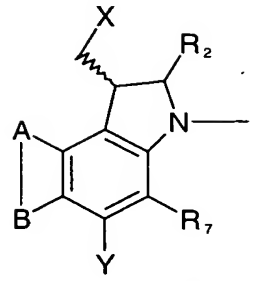
n and m are positive integers, or one of them may be zero;

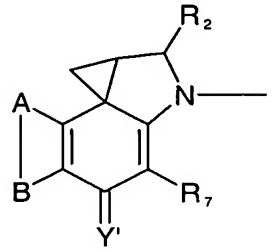
T′ is a combinatorial unit, where each T′ may be different if m is greater than 1;

T″ is a combinatorial unit which provides a site for the attachment of D;

D is selected from:

(a)

(i) 

(ii) 

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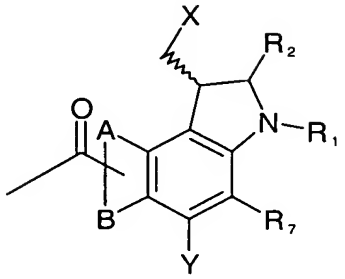
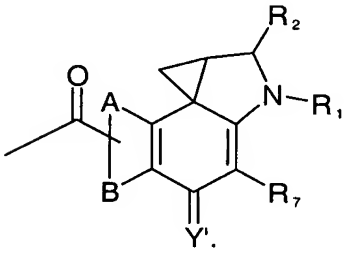
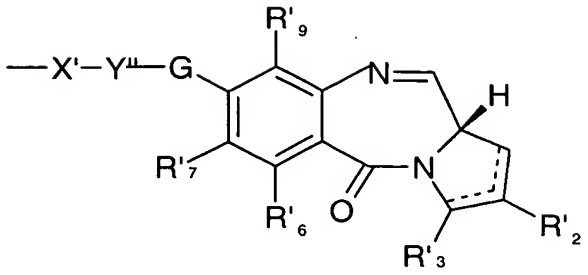
(iii) 

(iv) 

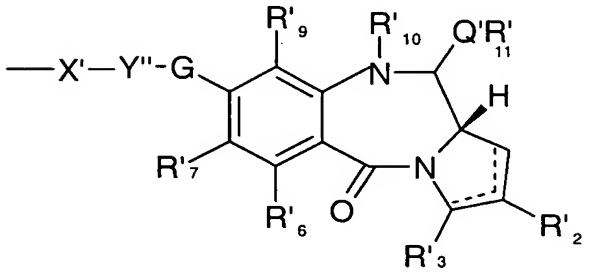
wherein A, B, Y, R_1, R_2 and R_7 are as defined in claim 10 and Y′ is NH, NR, O or S;

(b)

(i)



(ii)



B1

wherein:

X′ is selected from CO, NH, S, or O;

G is O, S, NH, or a single-bond;

R'_2 and R'_3 are independently selected from: H, R, OH, OR, =O, =CH-R, $=CH_2$, CH_2-CO_2R, CH_2-CO_2H, CH_2-SO_2R, O-SO_2R, CO_2R, COR and CN, and there is optionally a double bond between C_2 and C_3;

R'_6, R'_7, and R'_9 are independently selected from H, R, OH, OR, halo, nitro, amino, Me_3Sn;

R'_{11} is either H or R;

Q′ is S, O or NH;

R'_{10} is a nitrogen protecting group;

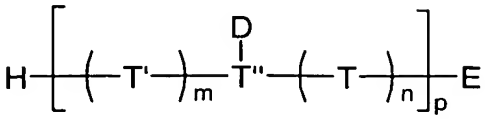
Y″ is a divalent group such that HY=R;

p is a positive integer, where if p is greater than 1, for each repeating unit, the meaning of T, T′, T″ and D and the values of n and m are independently selected; and,

E is selected from the same possibilities as D;

provided that at least one group D or E is selected from (a).

21. (Original) A compound of formula (**VIII**):

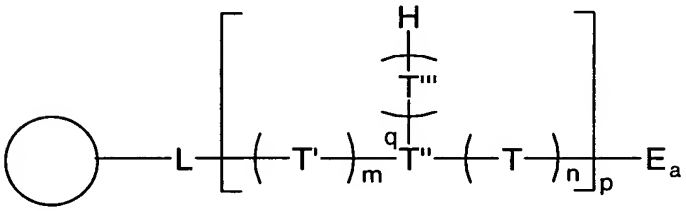


(VIII)

wherein:

L, T, T′, T″, D, E, n, m and p are as defined in claim 20.

22. (Previously presented) A compound of formula (**IX**):



(IX)

wherein:

◯ , L, T, T′, T″, n, m and p are as defined in claim 20;

T′ ″ is a combinatorial unit;

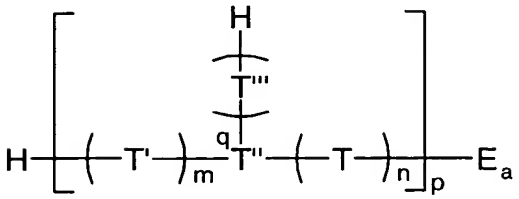
q is a positive integer, where if q is greater than 1, each T′ ″ may be different; and,

E_a is selected from the group (a) of E as defined in claim 20;

wherein:

if p is greater than 1, for each repeating unit the meaning of T, T, T, T and the values of n, m and q are independently selected.

23. (Original) A compound of formula (**X**):



(X)

wherein:

L, T, T, T, T, E_a, n, m, p and q are as defined in claim 22.

24. (Original) A collection of compounds all of which are represented by either:

(i) formula **III** as defined in claim 12;

(ii) formula **III'** as defined in claim 13;

(iii) formula **V** as defined in claim 14;

(iv) formula **V'** as defined in claim 15;

(v) formula **IV** as defined in claim 16;

(vi) formula **IV'** as defined in claim 17;

(vii) formula **VII** as defined in claim 20;

(viii) formula **VIII** as defined in claim 21;

(ix) formula **IX** as defined in claim 22; or,

(x) formula **X** as defined in claim 23.

25. (Original) A method of preparing a collection of compounds as defined in claim 24.

26. (Original) A method of screening compounds of:

(i) formula **IV** as defined in claim 16;

(ii) formula **IV'** as defined in claim 17;

(iii) formula **VIII** as defined in claim 21; or,

(iv) formula **X** as defined in claim 23;

to discover biologically active compounds.

27. (Original) The use of a compound of:

(i) formula **IV** as defined in claim 16;

(ii) formula **IV'** as defined in claim 17;

(iii) formula **VIII** as defined in claim 21; or,

(iv) formula **X** as defined in claim 23;

in the manufacture of a cytotoxic, antibiotic, antiparasitic or antiviral therapeutic composition.

28. (Original) The use of a compound of:

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(i) formula **III** as defined in claim 12;

(ii) formula **III'** as defined in claim 13;

(iii) formula **V** as defined in claim 14;

(iv) formula **V'** as defined in claim 15;

(v) formula **VII** as defined in claim 20; or,

(vi) formula **IX** as defined in claim 22;

in a method of diagnosis.

29. (Original) The use of a compound of:

(i) formula **IV** as defined in claim 16;

(ii) formula **IV'** as defined in claim 17;

(iii) formula **VIII** as defined in claim 21; or,

(iv) formula **X** as defined in claim 23;

in a method of target validation.

30. (Original) The use of a compound of:

(i) formula **IV** as defined in claim 16;

(ii) formula **IV'** as defined in claim 17;

(iii) formula **VIII** as defined in claim 21; or,

(iv) formula **X** as defined in claim 23;

in a method of functional genomics.

31. (New) A compound of the formula: